

AMENDMENTS TO THE CLAIMS

The following listing of the claims will replace all prior versions and listings of the claims in the application:

Listing of Claims:

1. (Currently amended) A symbol buffer memory device of a base station modem in a mobile communication system, in which the symbol data corresponding to at least one logical channel and coded in at least one encoding ratio is stored for transmission of the symbol data to a physical layer, the symbol buffer memory device comprising:

a buffer memory for storing the symbol data for the logical channel according to input sequences of the symbol data without division of segments, so that the symbol data ~~of the logical channels~~ are stored in a continuous arrangement according to data size of the logical channel;

a start address table for storing address information according to the logical channels, each of the address information indicating a location of initial symbol data corresponding to each of the logical channels from among the symbol data stored in the buffer memory; and

a multiplexer for selectively outputting the address information stored in the start address table by an enable signal set for each of the logical channels,

wherein when the symbol data is stored in the buffer memory, the address information indicating positions at which initial symbol data of each logical channel is stored in the start address table.

2. (Original) The symbol buffer memory device as claimed in claim 1, wherein, when storage of symbols corresponding to a predetermined logical channel has been completed, an initial symbol of a logical channel is subsequently stored at a position of a word in the buffer memory next to the already-stored symbols.

3. (Original) The symbol buffer memory device as claimed in claim 1, wherein a selection signal input to the multiplexer is produced by reading an enable state of a

corresponding channel by means of a pulse signal of each channel, the enable state of the corresponding channel being stored in the start address table.

4. (Original) The symbol buffer memory device as claimed in claim 1, wherein, when symbol data for one channel are divided and stored in at least two storage sectors of the buffer memory, link information between the storage sectors in which the symbol data for said one channel are stored is stored in the buffer memory.

5. (Original) The symbol buffer memory device as claimed in claim 1, wherein, when symbol data for one channel are divided and stored in at least two storage sectors of the buffer memory, link information between the storage sectors in which the symbol data for said one channel are stored is stored in the start address table.

6. (Currently amended) A method of storing symbol data in a symbol buffer memory device of a base station modem in a mobile communication system, in which the symbol data corresponding to at least one logical channel and coded in at least one encoding ratio is stored in the symbol buffer memory device for transmission of the symbol data to a physical layer, the method comprising the steps of :

storing the symbol data for the logical channel according to input sequences of the symbol data in a buffer memory without division of segments, so that the symbol data ~~of the logical channels~~ are stored in a continuous arrangement according to data size of the logical channel;

storing address information according to the logical channels in a start address table, each of the address information indicating a location of initial symbol data corresponding to each of the logical channels from among the symbol data stored in the buffer memory; and

selectively outputting the address information stored in the start address table by an enable signal set for each of the logical channels,

wherein when the symbol data is stored in the buffer memory, the address information indicating positions at which initial symbol data of each logical channel is stored in the start address table.

7. (Original) The method as claimed in claim 6, wherein, when storage of symbols corresponding to a predetermined logical channel has been completed, an initial symbol of a logical channel is subsequently stored at a position of a word in the buffer memory next to the already-stored symbols.

8. (Original) The method as claimed in claim 6, wherein a selection signal input to the multiplexer is produced by reading an enable state of a corresponding channel by means of a pulse signal of each channel, the enable state of the corresponding channel being stored in the start address table.

9. (Original) The method as claimed in claim 6, wherein, when symbol data for one channel are divided and stored in at least two storage sectors of the buffer memory, link information between the storage sectors in which the symbol data for said one channel are stored is stored in the buffer memory.

10. (Original) The method as claimed in claim 6, wherein, when symbol data for one channel are divided and stored in at least two storage sectors of the buffer memory, link information between the storage sectors in which the symbol data for said one channel are stored is stored in the start address table.

11. (New) The symbol buffer memory device as claimed in claim 1, wherein the enable signal represents if the logical channel is operating.

12. (New) The symbol buffer memory device as claimed in claim 1, when the symbol data stored in the symbol buffer memory are read and the symbol data of the corresponding channel are separately stored in different sectors, the symbol data stored in the linked sector are continuously read.

13. (New) The symbol buffer memory device as claimed in claim 1, wherein the buffer memory comprises a first memory and a second memory, the symbol data of all channels corresponding to a predetermined frame are first recorded in the first memory, and all symbol data corresponding to a frame input next to the predetermined frame are recorded in the second memory so that the symbol data stored in the first memory is read simultaneously when the symbol data of the next input frame are stored in the second memory.

14. (New) The method as claimed in claim 6, wherein the enable signal represents if the logical channel is operating.

15. (New) The method as claimed in claim 6, wherein when the symbol data stored in the symbol buffer memory are read and the symbol data of the corresponding channel are separately stored in different sectors, the symbol data stored in the linked sector are continuously read.

16. (New) The method as claimed in claim 6, wherein the buffer memory comprises a first memory and a second memory, the symbol data of all channels corresponding to a predetermined frame are first recorded in the first memory, and all symbol data corresponding to a frame input next to the predetermined frame are recorded in the second memory so that the symbol data stored in the first memory is read simultaneously when the symbol data of the next input frame are stored in the second memory.